

# MATERIAL SAFETY DATA SHEET

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### Product Identification

Product Name: ER Foam 502772 S B-Resin  
Product Number: 2.7 pound density foam  
Chemical Name: Urethane system resin component  
Chemical Family: resin  
CAS Number: Blend

### Company Identification

ER Systems  
6900 Bleck Drive  
Rockford, MN 55373  
1-800-403-7747 (For product information)  
1-800-535-5053 Infotrac (For emergencies)

### **SPECIAL NOTES:**

2.7 pound density polyurethane foam system resin component.

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

### **COMPONENT LISTING:**

<u>Chemical Name</u>	<u>Amount</u>	<u>CAS Number</u>
POLYOL	< 80.0 %	
GLYCEROL	< 2.0 %	56-81-5
FLAME RETARDANT	< 12.0 %	
DIMETHYLAMINO ETHANOL	< 5.0 %	108-01-0
ETHYLENE GLYCOL	1.0 %	107-21-1
SURFACTANT	< 3.0 %	
CATALYST	< 3.0 %	
1,1,1,3,3-PENTAFLUOROPROPANE	< 10.0 %	460-73-1

(See Section 8 for exposure guidelines)

(See Section 15 for regulatory information)

### **HAZARDS DISCLOSURE**



(section 2 continued)

As defined under Sara 311 and 312, this product contains materials that are hazards.

### 3. HAZARDS IDENTIFICATION

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***** EMERGENCY OVERVIEW *****
*
* CAUTION
*
* Caution: Contains material which can cause nervous
* system damage. May cause difficulty breathing.
* Contains material which can cause kidney damage.
* May adversely effect the developing fetus based on
* animal data. May cause eye, skin and respiratory
* tract irritation. Corrosive to skin. Severely
* irritating to eyes, skin, respiratory tract.
* Sensitizer.
*
*****
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HMIS Rating - Health: 1  
Flammability: 1  
Reactivity: 1

#### POTENTIAL HEALTH EFFECTS

##### EYE:

Contact may cause eye irritation.

##### SKIN:

May cause allergic skin reaction. Dimethylaminoethanol is extremely irritating to the skin. Direct contact with the skin is corrosive. Can cause moderate skin irritation. Repeated skin contact may result in sensitization.

##### INHALATION:

Avoid breathing vapors or mists. Prolonged or excessive inhalation may cause respiratory tract irritation. Inhalation of dimethylaminoethanol at high concentrations has been known to produce respiratory difficulties, loss of coordination and decreased motor activity in rats.

##### INGESTION:

Harmful if swallowed. May cause gastrointestinal disturbances.



(section 3 continued)

**CHRONIC EFFECTS:**

Repeated skin contact with dimethylaminoethanol may result in sensitization. Repeated inhalation has been known to produce effects on the eyes and nasal mucosa as well as respiratory and olfactory lesions in experimental animals. Exposure to dimethylaminoethanol has been associated with visual and ocular changes and is reversible upon significantly reduced or ceased exposure. Chronic overexposure to ethylene glycol may lead to liver degeneration and severe kidney damage. Animal studies indicate that ethylene glycol may be embryotoxic and teratogenic by oral and inhalation routes. Ethylene glycol has been found to be noncarcinogenic in experimental animals.

**MEDICAL CONDITIONS AGRAVATED BY EXPOSURE:**

At levels above the recommended exposure limit, the fluorocarbon acts as a weak narcotic. Acute overexposure causes tremors, confusion, irritation, suffocation, and may result in cardiac sensitization.

**MISCELLANEOUS:**

Primary routes of exposure for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

#### **4. FIRST AID MEASURES**

**EYE CONTACT FIRST AID:**

After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Get medical attention.

**SKIN CONTACT FIRST AID:**

Remove and launder contaminated clothing and shoes before reuse. Wash affected area immediately with large amounts of soap and water. Get medical attention.

**INHALATION FIRST AID:**

If inhaled, remove to fresh air and keep the person calm. If not breathing, give artificial respiration. Get immediate medical attention.

**INGESTION FIRST AID:**

If swallowed, rinse mouth, and then drink plenty of water. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person.



## 5. FIRE FIGHTING MEASURES

### FLAMMABLE PROPERTIES

TCC Flash Point: > 93.3 C (> 199.9 F)

Autoignition Temperature: N/A

### FLAMMABLE LIMITS IN AIR

LEL: %

UEL: %

### FLAMMABLE PROPERTIES:

Full emergency equipment with self contained breathing apparatus and full protective clothing should be worn.

### EXTINGUISHING MEDIA:

Water, carbon dioxide, foam or dry powder.

### FIRE FIGHTING INSTRUCTIONS:

As in any fire, wear self-contained breathing apparatus pressure-demand MSHA/NIOSH (approved or equivalent) and full protective gear.

### COMBUSTION PRODUCTS:

Carbon monoxide, and carbon dioxide. Also have other toxic gases.

### MISCELLANEOUS:

Use cold water spray to cool fire exposed containers to minimize risk of rupture.

## 6. ACCIDENTAL RELEASE MEASURES

### SAFEGUARDS (PERSONNEL):

Wear safety goggles. Wear appropriate personal protective equipment. Ventilate spill area.

### INITIAL CONTAINMENT:

Contain spilled material. Absorb spills with inert material.

### LARGE SPILLS PROCEDURE:

Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Treat or dispose of waste material in accordance with all local, state/provincial, and national requirements.



## 7. HANDLING AND STORAGE

### RECOMMENDED STORAGE TEMPERATURE

Minimum: 21.1 C (70.0 F)  
Maximum: 26.7 C (80.1 F)

### SHELF LIFE: (in original, sealed containers)

6 months @ 21.1 C  
6 months @ 26.7 C

### HANDLING (PERSONNEL):

Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated contact with skin. Wash hands thoroughly after handling.

### HANDLING (PHYSICAL ASPECTS):

Product should not be mixed with air above atmospheric pressure for leak testing or any other purpose. Use dry nitrogen to transfer or leak test equipment pressurized with product. Avoid extreme temperatures. Close container after each use. Keep out of reach of children.

### STORAGE PRECAUTIONS:

Product that is frozen and/or tending sedimentation can be liquified or homogenized by careful application of indirect heat (do not use flames or direct contact with a heat source). Protect from direct sunlight. Keep in a cool, well-ventilated place. Avoid extreme heat. Store protected from freezing. Stored and transported in a cylinder under pressure. Must not be repackaged by the customer.

### MISCELLANEOUS:

Protect against moisture. Store in unopened original containers in a cool dry place.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### ENGINEERING CONTROLS:

Use local exhaust to control vapors/mists. glycerol  
OSHA PEL 5 mg/m3 respirable fraction: 15 mg/m3 total dust  
ACGIH TWA value 10 mg/m3 mist.

### EYE / FACE PROTECTION REQUIREMENTS:

Wear chemical goggles; also wear a face shield if splashing hazard exists.

### SKIN PROTECTION REQUIREMENTS:

Selection of specific items such as gloves, boots, apron or full-body suit will depend on operation. Wash hands thoroughly after handling.



(section 8 continued)

**RESPIRATORY PROTECTION REQUIREMENTS:**

When there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection. NIOSH-certified (or equivalent) organic vapour/particulate respirator.

**MISCELLANEOUS:**

Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice. Wear protective clothing as necessary to prevent contact. Avoid inhalation of vapours/mist. Wash soiled clothing immediately.

**EXPOSURE GUIDELINES:**

**ETHYLENE GLYCOL**

OSHA Ceiling Limit: 50 ppm, 125 mg/m<sup>3</sup>

**9. PHYSICAL AND CHEMICAL PROPERTIES**

FORM .....: Liquid  
COLOR .....: Amber  
ODOR .....: mild, amine-like  
SOLUBILITY IN WATER ...: Soluble  
BULK DENSITY .....: 9.9 lbs./gallon US  
PH .....: > or = 7  
VISCOSITY .....: 400-900 mPa.s @ 21 C

**10. STABILITY AND REACTIVITY**

**STABILITY:**

Stable. Do not heat.

**INCOMPATIBILITY WITH OTHER MATERIALS:**

> 80 degrees Fahrenheit. Avoid moisture. Avoid direct sunlight. Avoid excessive temperatures. Avoid oxidizing agents, and diisocyanates.

**DECOMPOSITION:**

Hazardous decomposition products carbon monoxide, carbon dioxide.

**CONDITIONS TO AVOID:**

> 80 degrees Fahrenheit.



**11. TOXICOLOGICAL INFORMATION**

No information available.

**12. ECOLOGICAL INFORMATION**

No information available.

**13. DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL:**

Incinerate in a licensed facility. Dispose of in a licensed facility.  
Do not discharge into waterways or sewer systems.

**CONTAINER DISPOSAL:**

Steel drums must be emptied and can be sent to a licensed drum  
reconditioner for reuse, a scrap metal dealer or an approved landfill.  
Refer to 40 CFR 261.7 ( residues of hazardous waste in empty containers).  
Decontaminate containers prior to disposal. Recommend crushing,  
puncturing or other means to prevent unauthorized use of used containers.

**14. TRANSPORTATION INFORMATION**

PRODUCT LABEL .....: ER Foam 502772 S B-Resin  
D.O.T. SHIPPING NAME .....: N/A  
TECHNICAL SHIPPING NAME ...: N/A  
D.O.T. HAZARD CLASS .....: N/A  
UN NUMBER .....: N/A

**15. REGULATORY INFORMATION**

**Canadian Disclosure List**

ETHYLENE GLYCOL (107-21-1)

**SARA Title III - Section 313**

ETHYLENE GLYCOL (107-21-1)

**CERCLA Hazardous Substances**

ETHYLENE GLYCOL (107-21-1) --



(section 15 continued)

**Title v**

ETHYLENE GLYCOL (107-21-1)

**SC Toxic Air Pollutants List**

ETHYLENE GLYCOL (107-21-1)

**MISCELLANEOUS INFORMATION:**

OSHA hazard category: Chronic target organ effects reported, ACGIH TLV established  
CERCLA RQ ethyleneglycol 5000 lbs. SARA hazard categories (EPCRA 311/312): Acute, Chronic  
SARA 313: Ethyleneglycol  
State Regulations: State RTK glycerol MA, PA  
2-dimethylaminoethanol MA, NJ, PA  
CA Prop. 65: This product contains a chemical(s) known to the state of California to cause cancer.

**16. OTHER INFORMATION**

PREPARED BY .....: Chemist  
APPROVED BY .....: Laura Vollenweider  
TITLE .....: Chemist  
APPROVAL DATE .....: August 22, 2008  
SUPERCEDES DATE ...: New  
RTN NUMBER .....: 00000165 (Official Copy)

**ADDITIONAL INFORMATION:**

The data in this Material Safety Data Sheet relates only to the specific material designated herein.

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To the best of our knowledge, the information contained in this MSDS is accurate. It is intended to assist the user in his evaluation of the product's hazards, and safety precautions to be taken in its use. The data in this MSDS relate only to the specific material designated herein. We do not assume liability for the use of, or reliance on this information, nor do we guarantee its accuracy or completeness.

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END OF MSDS  
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